A NEW AND EASY METHOD

OF APPLYING A TUBE

FOR THE CURE OF THE

FISTULA LACHRYMALIS.

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THE Author of the following Pages, having carefully compared what is advanced in them with what M. HEISTER had before ſaid, on the Treatment of the Fiſtula Lachrymalis, thinks, he may, with Propriety, call the Practice now recommended, a new Mode of Cure for this Diſorder. For, though HEISTER had long before introduced the Uſe of the Metal Tube; yet the Manner of placing it by him was ſo very different from that now propoſed, and led to ſo very different a Proceſs, that hardly any two Operations in Surgery can be more diſtinct from one another. It is preſumed, a conſiderable Advantage muſt lie on the Side of that, which precludes the Neceſſity of Perforation. This the Direction of the Tube through the Lachrymal Duct, inſtead of the Os Unguis, moſt effectually does. But Experience will beſt determine, how far this Method of Cure is preferable to others, in that, or any other Reſpect. One Thing will not be denied of it—It is ſimple and eaſy.

A New and Eaſy Method, &c.

IN an ingenious paper*, lately read before the Royal Society, a new method was propoſed for the cure of the Fiſtula Lachrymalis in its firſt ſtage. This was by pouring quickſilver through the Puncta into the Sac; the ſpecific gravity of which, it was obſerved, would give it a much greater chance of removing the obſtruction in the Canal, than by injecting a watery fluid through it, as was adviſed by Monſieur Anell.

This method, however, the author allows, can only ſucceed in caſes where the obſtruction is ſlight and recent. In all thoſe, where the diſorder has been of long continuance, and the obſtruction is conſiderable, the faculty are now univerſally agreed, that an opening muſt be made into the Sac; in order to admit a tent of lead, or ſome other ſolid ſubſtance, into the Duct. The tent, whatever it be, muſt be continued through

* A New Method of treating the Fiſtula Lachrymalis. By William Blizard, Surgeon, and F. S. A. Read at the Royal Society, Feb. 24, 1780.

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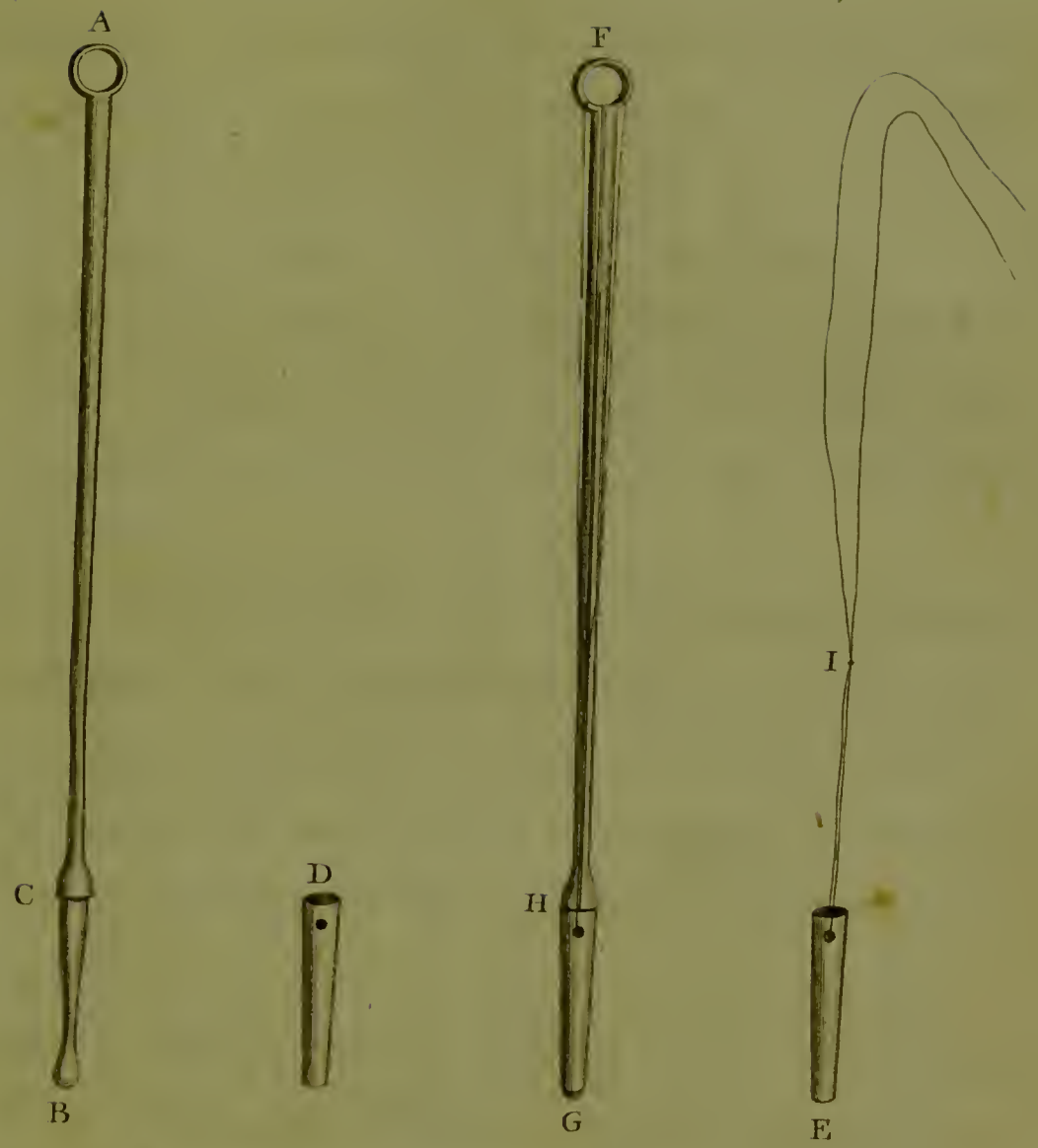
the Duct, and left there, for the ſpace of two months or more; to prevent, if poſſible, a return of the like obſtruction.

But ſuperior as this method is to any of the modes of cure before uſed, there are objections of ſome weight which lie againſt it. It is attended with great uncertainty: and no one can have practiſed it, without finding, in ſome caſes, a return of the diſorder; owing, either to a freſh ſwelling of the membrane which lines the Duct, or to a ſpongineſs of the bones themſelves by which the Duct is formed.

Repeated experience of the truth of this remark, in the courſe of my practice, convinced me of the neceſſity of a further improvement: and it being well known, that metals not liable to ruſt, as lead, ſilver, gold, may ſafely lodge in any part of the body, for years, and even for life, without the leaſt detriment; I conceived it highly probable, that a hollow tube, made of ſome of thoſe metals, and inſerted into the Lachrymal Duct, might well ſupply the defect.

I accordingly made the experiment, with very good effect, and have ſince had ſeveral repeated proofs of its ſingular utility. I have



A The Ring at the Top of the Style.

B The inferior Extremity of the Style rounded, ſo as to fill exactly the ſmaller End of the Tube.

C The Shoulder; by Means of which the Style is prevented from paſſing further in the Tube than it is deſigned it ſhould.

D The Tube, with a ſmall Perforation near its upper or larger Aperture, for the Admiſſion of a Thread.

E The Tube, with its Thread in it.

F G H The Style, Tube and Thread, put together; which points out the Manner in which the Inſtrument is fitted for Uſe.

I The Knot tied in the Thread, at the Diſtance of an Inch from the Tube.

The Styles and Tubes are made and fold by

generally made uſe of gold; becauſe moſt eaſy to be procured in a ſtate of perfect purity, which is a quality firſt to be regarded, whatever the metal be: and I prefer this or ſilver to lead, chiefly on account of their firmer texture, which muſt render a tube, made of either of them, leſs liable to be affected by any preſſure it may receive.

The tube is conſtructed in the following manner: Its ſhape is ſomewhat conical, to prevent its deſcent into the noſe; and it is made ſufficiently long, to reach from the upper portion of the Bony Duct, to its aperture below the Os Spongioſum.

To introduce it more eaſily, it is furniſhed with a ſtyle, nearly as long as a common probe; the lower end of which is rounded, ſo as that, paſſing through the tube, it may exactly fill the aperture at the ſmall end: and it is prevented from paſſing further, by a ſhoulder of the ſame ſize with the outſide of the tube.

The tube is held upon the ſtyle by a doubled thread, which paſſes through a ſmall hole on one ſide of its upper or larger aperture; and is continued to a ring at the upper end of the

ſtyle.

ſtyle. By faſtening this thread to the ring, the ſtyle and tube become one inſtrument, capable of being introduced and extracted at pleaſure; and poſſeſſing all the power of a probe.

By means of this, the operator may be enabled to examine the ſtate of the diſeaſe, and to judge with the greateſt preciſion of the diameter of the Duct, and conſequently of the proper ſize of the tube. For, as the Duct in perſons of different ages, &c. will vary, both in the diameter and length; there muſt, on this account, be a proportional difference in the tube: and the operator ſhould therefore be furniſhed with ſtyles and tubes of ſeveral different ſizes; though I have found that, which is repreſented in the drawing annexed, exactly to fit the Duct in moſt caſes.

The neceſſity of paying a cloſe attention to the ſize of the tube is apparent. For, if it be too large, it cannot be introduced; and, if too ſmall, it will be liable to ſlip, if not paſs through the lower aperture of the Duct into the noſe. If, again, it riſes too high; it may preſs againſt the ſides of the Sac, and thus cloſe the orifice, through which the tears ſhould paſs. If, on the other hand, it comes down too low; it will

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project beyond the inferior extremity of the Duct, and may produce a very troubleſome titillation. When the tube is found exactly to fit; the thread, which was paſſed through the ring at the upper end of the ſtyle, being tied in a knot, at about the diſtance of an inch from the top of the tube, the longer portion of it, above the knot, is to be cut off. By this, the ſtyle will be diſengaged, ſo that it may be extracted with eaſe, leaving the tube behind, with the thread hanging out of the wound.

When the tube is fixed, I uſually paſs, by ſyringe, ſome ſimple liquor through it into the noſe, as a proof of its being ſo placed that it will anſwer the intended purpoſe. The opening made in the Sac might be entirely cloſed within the ſpace of a few days, did I not think it right to leave the thread in. When it has continued there about a week, if the tears, abſorbed by the Puncta, are conveyed by the tube to the noſe; the thread, which is double, may then be extracted, by cutting one ſide of it with the ſciſſors, and drawing the other out. The little orifice, through which the threads paſſed, will be cloſed in the ſpace of a day. And thus a

diſorder, which had continued for months, and perhaps years, may be perfectly cured, within the ſhort ſpace of a week.

I firſt performed this operation on two patients, the elder of which did not exceed eleven years. In both of them the diſorder was of conſiderable ſtanding; and, in the elder, had riſen to ſuch a heighth, as to occaſion very diſtreſſing apprehenſions. On application to me, I firſt began with making an opening through the integuments; and cleared the obſtructions in the Ducts, by paſſing a common probe through them. Had I proceeded according to the common method, I ſhould then have applied a bougie, or tent, which, as I have ſaid, was uſual in ſuch caſes: but recollecting how often this practice had failed, I determined on following my own judgment in the uſe of ſuch a tube as is above deſcribed. In one of theſe caſes, the tube paſſed with but little difficulty; in the other, the Duct being more obſtructed, the introduction, as was naturally to be expected, was more troubleſome and painful to the patient. In the latter, however, the uneaſineſs ſoon went off, after the operation was finiſhed. From the time of fixing

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the tube, the tears, inſtead of falling down the cheek, as they were uſed to do, had paſſed through that channel into the noſe; in conſequence of which, both my patients, as I found, could the very next morning open their eyes with a degree of freedom, which they had not known till now, ever ſince the firſt attack of the diſorder. The eye-lids, alſo, which every morning had been ſtuck together by an adheſive matter lodging on their edges, now admitted ſeparation without difficulty, and became perfectly clean. When I removed the dreſſings, I found very little remains of the wounds, which had been made in the Sac; and thoſe no more than what were kept open by the ſtrings, and which could not cloſe till they were removed. When a week had paſſed, as both the patients continued perfectly well, I drew out the ſtrings; leaving the tubes in the Ducts. The orifice, thro' which the ſtrings paſſed, was healed in a day: and a cure was compleatly effected in both caſes.

Since that time, both myſelf and my partner, Mr. Ware, have repeated the operation on ſeveral perſons of different ages, and have uniformly ſucceeded in all.

It is proper that I ſhould here take notice of two objections which may be made to this proceſs. One is, that the tube, becoming looſe, may move upwards, and preſſing againſt, irritate the membrane which lines the Sac: the other, that the tube paſſing downwards into the noſe, may be either diſcharged, or inſenſibly ſwallowed. In both theſe inſtances, the operation may be ſuppoſed to fail. In reply, it may be obſerved, that the tube can neither aſcend nor deſcend; if it be of a right ſize, and properly fixed in the bony channel. But ſhould it riſe, ſo as to irritate the Sac, it may be eaſily put down again by the finger. This will always be found a preſent remedy, and may be repeated as often as there ſhall be occaſion; till the tube has been ſo long in the Duct, as to ſecure the continuance of the natural paſſage: after which, it may be taken out by inciſion, or puſhed downward into the noſe by the probe.

As to the other accident, to which the patient is ſuppoſed to be liable; I muſt firſt remark, that I have only met with one caſe in which the tube has been diſcharged by the noſe; whereas I have known ſeveral, in which a lead plummet,

met, or leathern bougie, has paſſed that way: and not one inſtance has ever occurred to me, in which either plummet, tent, or tube, has been ſwallowed. But ſhould the latter happen; as the metals, of which theſe tubes are compoſed, are not in the leaſt hurtful, the quantity uſed in them is ſo ſmall, and they are ſo well poliſhed, it is really impoſſible that any harm ſhould enſue.

It is alſo to be carefully noticed, that the tube, though it ſhould fail of its original deſign, as an artificial Duct, appears ſtill to be much more certain in its effect, and, upon every account, greatly preferable to the leaden tent or bougie; as it may remain longer, with leſs inconvenience, than either of thoſe ſubſtances, within the lachrymal Duct.

As the caſe, in which the tube paſſed through the Duct into the noſe, was ſomewhat ſingular, and may afford a uſeful caution to thoſe who practice this operation; I ſhall conclude with a particular relation of it.

The patient was a young man, about twenty-two years of age; who had been afflicted with this diſorder ever ſince he was three months old,

old, and had nearly loſt the ſight of one eye, in conſequence of repeated inflammations, which the fiſtula occaſioned. The common mode of treating the diſorder, by the introduction of a bougie, had been fully tried, without effect. I paſſed the tube into the duct with great eaſe, and without meeting any reſiſtance; which circumſtance, though very pleaſing to the patient, made me fearful, that the operation would not ſucceed. When the ſtyle was taken away, I tried to move the tube, by means of the ſtring; when, finding it did not eaſily ſlip, or give way, I determined to leave it. The tears immediately reſumed their proper courſe: in a few days, I drew out the ſtring, and the patient became perfectly well. He continued ſo about a fortnight; when the tube roſe in the Duct, and preſſed againſt the ſide of the Sac, in ſuch a manner, as to prevent the tears from paſſing through it. This was ſoon remedied, for the preſent, by preſſing the tube down with my finger: but it was not long, before the tears were again obſtructed, though the inſtrument did not riſe at all. I applied the Thebaic tincture to the eye,

for the purpoſe of exciting a greater ſecretion of tears; and in hopes that filling the Sac with this fluid might be the means of removing any ſlight obſtruction which was formed in it. This did not ſucceed according to my wiſhes. But, recollecting, that the tube paſſed into the Duct with great eaſe, and that, inſtead of riſing, it might now poſſibly have ſunk too low; I made a ſecond opening through the integuments into the Sac, in order to find out and remove the tube: and accordingly, on examination, I found it was far advanced in the duct towards the noſe: I applied the probe to carry it quite through, and the patient immediately diſcharged it into his handkerchief. A ſecond tube was afterwards introduced, and a particular attention given, that it might fit the Duct more exactly: and that it did ſo, I knew by the reſiſtance it met with in paſſing, and the firmneſs with which it appeared to be fixed in its proper place.

The tears immediately reſumed their proper courſe, and continued to paſs freely through the tube for a conſiderable time; when, to my great ſurprize, this ſecond tube came out, on blowing the

the noſe. This is no otherwiſe to be accounted for, but by the enlargement of the natural paſſage, on its being perfectly healed. It is, however, a proof, in point, of the truth of what was before obſerved, on the benefit ariſing from the temporary continuance of the tube in the Duct: for, to that we muſt aſcribe the reſtoration of the latter to its ſound and natural ſtate; in conſequence of which, the tube was diſcharged. And how perfect the cure is, we have the beſt and fulleſt evidence in the continued free paſſage of the tears ever ſince.

F I N I S.